maintain the toilet facility in the locomotive consistent with the requirements of this part, including locomotives used in switching service pursuant to paragraph (b)(1)(ii) of this section, and in transfer service pursuant to paragraph (b)(1)(iii) of this section.

(j) *Newly manufactured units; in-cab facilities.* All locomotives manufactured after June 3, 2002, except switching units built exclusively for switching service and locomotives built exclusively for commuter service, shall be equipped with a sanitation compartment accessible to cab employees without exiting to the out-of-doors for use. No railroad may use a locomotive built after June 3, 2002, that does not comply with this subsection.

(k) *Potable water.* The railroad shall utilize potable water where the washing system includes the use of water.

[67 FR 16050, Apr. 4, 2002]

§ 229.139 Sanitation, servicing requirements.

(a) The sanitation compartment of each lead locomotive in use shall be sanitary.

(b) All components required by § 229.137(a) for the lead locomotive in use shall be present consistent with the requirements of this part, and shall operate as intended such that:

(1) All mechanical systems shall function;

(2) Water shall be present in sufficient quantity to permit flushing;

(3) For those systems that utilize chemicals for treatment, the chemical (chlorine or other comparable oxidizing agent) used to treat waste must be present; and

(4) No blockage is present that prevents waste from evacuating the bowl.

(c) The sanitation compartment of each occupied locomotive used in switching service pursuant to § 229.137(b)(1)(ii), in transfer service pursuant to § 229.137(b)(1)(iii), or in a trailing position when the locomotive is occupied, shall be sanitary.

(d) Where the railroad uses a locomotive pursuant to § 229.137(e) in switching or transfer service with a defective toilet facility, such use shall not exceed 10 calendar days from the date on which the defective toilet facility became defective. The date on which the toilet facility becomes defective shall be entered on the daily inspection report.

(e) Where it is determined that the modesty lock required by § 229.137(a)(2) is defective, the railroad shall repair the modesty lock on or before the next 92-day inspection required by this part.

[67 FR 16050, Apr. 4, 2002]

Subpart D—Design Requirements

§ 229.141 Body structure, MU locomotives.

(a) MU locomotives built new after April 1, 1956 that are operated in trains having a total empty weight of 600,000 pounds or more shall have a body structure designed to meet or exceed the following minimum specifications:

(1) The body structure shall resist a minimum static end load of 800,000 pounds at the rear draft stops ahead of the bolster on the center line of draft, without developing any permanent deformation in any member of the body structure.

(2) An anti-climbing arrangement shall be applied at each end that is designed so that coupled MU locomotives under full compression shall mate in a manner that will resist one locomotive from climbing the other. This arrangement shall resist a vertical load of 100,000 pounds without exceeding the yield point of its various parts or its attachments to the body structure.

(3) The coupler carrier and its connections to the body structure shall be designed to resist a vertical downward thrust from the coupler shank of 100,000 pounds for any horizontal position of the coupler, without exceeding the yield points of the materials used. When yielding type of coupler carrier is used, an auxiliary arrangement shall be provided that complies with these requirements.

(4) The outside end of each locomotive shall be provided with two main vertical members, one at each side of the diaphragm opening; each main member shall have an ultimate shear value of not less than 300,000 pounds at a point even with the top of the

underframe member to which it is attached. The attachment of these members at bottom shall be sufficient to develop their full shear value. If reinforcement is used to provide the shear value, the reinforcement shall have full value for a distance of 18 inches up from the underframe connection and then taper to a point approximately 30 inches above the underframe connection.

(5) The strength of the means of locking the truck to the body shall be at least the equivalent of an ultimate shear value of 250,000 pounds.

(b) MU locomotives built new after April 1, 1956 that are operated in trains having a total empty weight of less than 600,000 pounds shall have a body structure designed to meet or exceed the following minimum specifications:

(1) The body structure shall resist a minimum static end load of 400,000 pounds at the rear draft stops ahead of the bolster on the center line of draft, without developing any permanent deformation in any member of the body structure.

(2) An anti-climbing arrangement shall be applied at each end that is designed so that coupled locomotives under full compression shall mate in a manner that will resist one locomotive from climbing the other. This arrangement shall resist a vertical load of 75,000 pounds without exceeding the yield point of its various parts or its attachments to the body structure.

(3) The coupler carrier and its connections to the body structure shall be designed to resist a vertical downward thrust from the coupled shank of 75,000 pounds for any horizontal position of the coupler, without exceeding the yield points of the materials used. When a yielding type of coupler carrier is used, an auxiliary arrangement shall be provided that complies with these requirements.

(4) The outside end of each MU locomotive shall be provided with two main vertical members, one at each side of the diaphragm opening; each main member shall have an ultimate shear value of not less than 200,000 pounds at a point even with the top of the underframe member to which it is attached. The attachment of these members at bottom shall be sufficient to develop their full shear value, the reinforcement shall have full value for a distance of 18 inches up from the underframe connection and then taper to a point approximately 30 inches above the underframe connection.

(5) The strength of the means of locking the truck to the body shall be at least the equivalent of an ultimate shear value of 250,000 pounds.

APPENDIX A TO PART 229—FORM FRA 6180–49A

EDITORIAL NOTE: Appendix A, published at 45 FR 21118, Mar. 31, 1980, as part of the original document, is not carried in the CFR. Copies of Form FRA F6180–49A are available by contacting the Federal Railroad Administration, Office of Standards and Procedures, 400 7th St., SW., Washington, DC 20590.

APPENDIX B TO PART 229—SCHEDULE OF CIVIL PENALTIES[1]

Section	Violation	Willful violation
Subpart A—General		
229.7 Prohibited acts: Safety deficiencies not governed by specific regulations: To be assessed on relevant facts	$1,000–5,000	$2,000–7,500
229.9 Movement of noncomplying locomotives	(1)	(1)
229.11 Locomotive identification	1,000	2,000
229.13 Control of locomotives	2,500	5,000
229.17 Accident reports	2,500	5,000
229.19 Prior Waivers	(1)	(1)
Subpart B—Inspection and tests		
229.21 Daily inspection:		
(a)(b):		
(1) Inspection overdue	2,000	4,000
(2) Inspection report not made, improperly executed, or not retained	1,000	2,000
(c) Inspection not performed by a qualified person	1,000	2,000

Section	Violation	Willful violation
229.23 Periodic inspection General		
(a)(b):		
(1) Inspection overdue	2,500	5,000
(2) Inspection performed improperly or at a location where the underneath portion cannot be safely inspected	2,500	5,000
(c)(d):		
(1) Form missing	1,000	2,000
(2) Form not properly displayed	1,000	2,000
(3) Form improperly executed	1,000	2,000
(e) Replace Form FRA F 6180–49A by April 2	1,000	2,000
(f) Secondary record of the information reported on Form FRA F 6180.49A	1,000	2,000
229.25		
(a) through (e)(4) Tests: Every periodic inspection	2,500	5,000
(e)(5) Ineffective maintenance	8,000	16,000
229.27 Annual tests	2,500	5,000
229.29 Biennial tests	2,500	5,000
229.31:		
(a) Biennial hydrostatic tests of main reservoirs	2,500	5,000
(b) Biennial hammer tests of main reservoirs	2,500	5,000
(c) Drilled telltale holes in welded main reservoirs	2,500	5,000
(d) Biennial tests of aluminum main reservoirs	2,500	5,000
229.33 Out-of-use credit	1,000	2,000
Subpart C—Safety Requirements		
229.41 Protection against personal injury	2,500	5,000
229.43 Exhaust and battery gases	2,500	5,000
229.45 General condition: To be assessed based on relevant facts	1,000–5,000	2,000–7,500
229.46 Brakes: General	2,500	5,000
229.47 Emergency brake valve	2,500	5,000
229.49 Main reservoir system:		
(a)(1) Main reservoir safety valve	2,500	5,000
(2) Pneumatically actuated control reservoir	2,500	5,000
(b)(c) Main reservoir governors	2,500	5,000
229.51 Aluminum main reservoirs	2,500	5,000
229.53 Brake gauges	2,500	5,000
229.55 Piston travel	2,500	5,000
229.57 Foundation brake gear	2,500	5,000
229.59 Leakage	2,500	5,000
229.61 Draft system	2,500	5,000
229.63 Lateral motion	2,500	5,000
229.64 Plain bearing	2,500	5,000
229.65 Spring rigging	2,500	5,000
229.67 Trucks	2,500	5,000
229.69 Side bearings	2,500	5,000
229.71 Clearance above top of rail	2,500	5,000
229.73 Wheel sets	2,500	5,000
229.75 Wheel and tire defects:		
(a),(d) Slid flat or shelled spot(s):		
(1) One spot 2½″ or more but less than 3″ in length	2,500	5,000
(2) One spot 3″ or more in length	5,000	7,500
(3) Two adjoining spots each of which is 2″ or more in length but less than 2½″ in length	2,500	5,000
(4) Two adjoining spots each of which are at least 2″ in length, if either spot is 2½″ or more in length	5,000	7,500
(b) Gouge or chip in flange of:		
(1) more than 1½″ but less than 1⅝″ in length; and more than ½″ but less than ⅝″ in width	2,500	5,000
(2) 1⅝″ or more in length and ⅝″ or more in width	5,000	7,500
(c) Broken rim	5,000	7,500
(e) Seam in tread	2,500	5,000
(f) Flange thickness of:		
(1) ⅞″ or less but more than 13⁄16″	2,500	5,000
(2) 13⁄16″ or less	5,000	7,500
(g) Tread worn hollow	2,500	5,000
(h) Flange height of:		
(1) 1½″ or greater but less than 1⅝″	2,500	5,000
(2) 1⅝″ or more	5,000	7,000
(i) Tire thickness	2,500	5,000
(j) Rim thickness:		
(1) Less than 1″ in road service and ¾″ in yard service	2,500	5,000
(2) 15⁄16″ or less in road service and 11⁄16″ in yard service	5,000	7,500
(k) Crack of less than 1″	5,000	7,500
(1) Crack of less than 1″	2,500	5,000

Section	Violation	Willful violation
(2) Crack of 1″ or more	5,000	7,500
(3) Break	5,000	7,500
(l) Loose wheel or tire	5,000	7,500
(m) Welded wheel or tire	5,000	7,500
229.77 Current collectors	2,500	5,000
229.79 Third rail shoes and beams	2,000	4,000
229.81 Emergency pole; shoe insulation	2,500	5,000
229.83 Insulation or grounding	5,000	7,500
229.85 Door and cover plates marked ''Danger''	2,500	5,000
229.87 Hand operated switches	2,500	5,000
229.89 Jumpers; cable connections:		
(a) Jumpers and cable connections; located and guarded	2,500	5,000
(b) Condition of jumpers and cable connections	2,500	5,000
229.91 Motors and generators	2,500	5,000
229.93 Safety cut-off device	2,500	5,000
229.95 Venting	2,500	5,000
229.97 Grounding fuel tanks	2,500	5,000
229.99 Safety hangers	2,500	5,000
229.101 Engines:		
(a) Temperature and pressure alarms, controls, and switches	2,500	5,000
(b) Warning notice	2,500	5,000
(c) Wheel slip/slide protection	2,500	5,000
229.103 Safe working pressure; factor of safety	2,500	5,000
229.105 Steam generator number	500	1,000
229.107 Pressure gauge	2,500	5,000
229.109 Safety valves	2,500	5,000
229.111 Water-flow indicator	2,500	5,000
229.113 Warning notice	2,500	5,000
229.115 Slip/slide alarms	2,500	5,000
229.117 Speed indicators	2,500	5,000
229.119 Cabs, floors, and passageways:		
(a)(1) Cab set not securely mounted or braced	2,500	5,000
(2) Insecure or improper latching device	2,500	5,000
(b) Cab windows of lead locomotive	2,500	5,000
(c) Floors, passageways, and compartments	2,500	5,000
(d) Ventilation and heating arrangement	2,500	5,000
(e) Continuous barrier	2,500	5,000
(f) Containers for fuses and torpedoes	2,500	5,000
229.121 Locomotive cab noise	2,500	5,000
229.123 Pilots, snowplows, end plates	2,500	5,000
229.125		
(a) Headlights	2,500	5,000
(d) Auxiliary lights	2,500	5,000
229.127 Cab lights	2,500	5,000
229.129 Audible warning device	2,500	5,000
229.131 Sanders	1,000	2,000
229.135		
(a) Lead locomotive without in-service event recorder	2,500	5,000
(b) Improper response to out of service event recorder	2,500	5,000
(c) Unauthorized removal from service	2,500	5,000
Failure to remove from service a recorder known to have failed	2,500	5,000
(d) Failure to preserve data or unauthorized extraction of data	2,500	5,000
(e) Tampering with device or data	2,500	7,500
Subpart D—Design Requirements		
229.141 Body structure, MU locomotives	2,500	5,000
229.137 Sanitation, general:		
(a) Sanitation compartment in lead unit, complete failure to provide required items	$5,000	$10,000
(1) Ventilation	2,500	5,000
(2) Door missing	2,000	4,000
(2)(i) Door doesn't close	1,000	2,000
(2)(ii) No modesty lock	1,000	2,000
(3) Not equipped with toilet in lead	5,000	10,000
(4) Not equipped with washing system	1,000	2,000
(5) Lack of paper	1,000	2,000
(6) Lack of trash receptacle	1,000	2,000
(b) Exceptions:		
(1)(i) Commuter service, failure to meet conditions of exception	2,500	5,000
(1)(ii) Switching service, failure to meet conditions of exception	2,500	5,000
(1)(iii) Transfer service, failure to meet conditions of exception	2,500	5,000
(1)(iv) Class III, failure to meet conditions of exception	2,500	5,000
(1)(v) Tourist, failure to meet conditions of exception	2,500	5,000

Section	Violation	Willful violation
(1)(vi) Control cab locomotive, failure to meet conditions of exception	2,500	5,000
(2) Noncompliant toilet	5,000	10,000
(c) Defective/unsanitary toilet in lead unit	2,500	5,000
(1–5) Failure to meet conditions of exception	2,500	5,000
(d) Defective/unsanitary unit; failure to meet conditions for trailing position	2,500	5,000
(e) Defective/sanitary unit; failure to meet conditions for switching/transfer service	2,500	5,000
(f) Paper, washing, trash holder; failure to equip prior to departure	2,500	5,000
(g) Inadequate ventilation; failure to repair or move prior to departure	2,500	5,000
(h) Door closure/modesty lock; failure to repair or move	1,000	2,000
(i) Failure to retain/maintain of equipped units	2,500	5,000
(j) Failure to equip new units/in-cab facility	2,500	5,000
(k) Failure to provide potable water	2,500	5,000
229.139 Servicing requirements:		
(a) Lead occupied unit not sanitary	2,500	5,000
(b) Components not present/operating	2,500	5,000
(c) Occupied unit in switching, transfer service, in trailing position not sanitary	2,500	5,000
(d) Defective unit used more than 10 days	2,500	5,000
(e) Failure to repair defective modesty lock	1,000	2,000

[1] A penalty may be assessed against an individual only for a willful violation. Generally, when two or more violations of these regulations are discovered with respect to a single locomotive that is used by a railroad, the appropriate penalties set forth above are aggregated up to a maximum of $10,000 per day. However, a failure to perform, with respect to a particular locomotive, any of the inspections and tests required under subpart B of this part will be treated as a violation separate and distinct from, and in addition to, any substantive violative conditions found on that locomotive. Moreover, the Administrator reserves the right to assess a penalty of up to $22,000 for any violation where circumstances warrant. See 49 CFR part 209, appendix A.

Failure to observe any condition for movement set forth in § 229.9 will deprive the railroad of the benefit of the movement-for-repair provision and make the railroad and any responsible individuals liable for penalty under the particular regulatory section(s) concerning the substantive defect(s) present on the locomotive at the time of movement. Failure to comply with § 229.19 will result in the lapse of any affected waiver.

[53 FR 52931, Dec. 29, 1988, as amended at 58 FR 36615, July 8, 1993; 61 FR 8888, Mar. 6, 1996; 63 FR 11622, Mar. 10, 199867 FR 16052, Apr. 4, 2002]

APPENDIX C TO PART 229—FRA LOCOMOTIVE STANDARDS—CODE OF DEFECTS

EDITORIAL NOTE: Appendix C, published at 45 FR 21121, Mar. 31, 1980, as part of the original document, is not carried in the CFR.

PART 230—STEAM LOCOMOTIVE INSPECTION AND MAINTENANCE STANDARDS

Subpart A—General

Subpart B—Boilers and Appurtenances